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EXAMINER	
MURPHY, TIMOTHY M	

ART UNIT	PAPER NUMBER
2611	

DATE MAILED: 06/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/458,897	GIAMMARRESI, TOM	
	Examiner	Art Unit	
	Timothy Murphy	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 3/23/2004.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-21 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-21 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 9 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 7. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 3-6 are rejected under 35 U.S.C. 112, second paragraph.

Claim 3 contradicts the base claim of Claim 2 in that the same managing module (from claim 2) in claim 3 is both "distributed" and "non-distributed" simultaneously.

Claim 4 also claims that the same managing module is both "distributed" and "non-distributed" simultaneously.

The examiner suggests that the method claims 3 and 4 are revised to reflect the corresponding apparatus claim of claim 15.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Duso et al (5,892,915), in view of Craig (5,790,176).

In regard to Claim 1, Duso discloses a method of distributing and sharing processing loads (servers 21 provide parallelism; col. 5, lines 48-49) and increasing fault tolerance (28 and 29 are dual redundant controllers and provide hot-failover redundant configuration; col. 6, lines 28-34) between provider equipment (Fig. 2, 20) and subscriber equipment (54) of an interactive information distribution system (VOD, etc. col. 5, lines 35-37), comprising the steps of:

receiving, at a head-end (20), a request for video information from said subscriber equipment (col. 8, lines 27-32);

executing a video session from at least one managing module (contain application software to appropriately schedule (execute) the service request; col. 8, lines 48-56) on a primary head-end controller (Fig. 2, 28) at said head-end;

dedicating, at said head-end, at least one secondary head-end controller (29) having said at least one managing module as a reserve resource for executing said video session (28 and 29 are dual redundant controllers (col. 6, line 28) that run an operating system to provide a hot-failover redundant configuration (col. 6, lines 31-36), that has application software to schedule (execute) the service request; col. 8, lines 48-56); and

streaming, from a stream server (Fig. 2, 21), said video information to said requesting subscriber equipment during a normal mode of operation (28 assigns an active 21 to a client 54 that is requesting multimedia service; col. 6, lines 46-48).

However, Duso fails to store session-state data from an executed video session on at least one storage device, as claimed.

In an analogous art, Craig teaches storing session-state data from an executed video session on at least one storage device (session manager 310 contains session supervisor 312 which tracks and records (stores in storage device for 310/312) all data pertinent to each session (col. 13, lines 46-56) and maintains routing information for each session (col. 14, lines 7-15)), for the

benefit of using the information to restart an interrupted session (col. 14, lines 13-15).

Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Duso with storing session-state data from an executed video session on at least one storage device, as taught by Craig, for the benefit of using the stored information to continue processing an interrupted video session in an interactive information distribution system.

6. Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duso et al (5,892,915), in view of Craig (5,790,176), in further view of Nelson et al (5,928,367).

In regard to Claim 2, the combined systems of Duso and Craig disclose the method of claim 1, further comprising the step of executing said video session from said at least one managing module on said primary head-end controller and said at least one secondary head-end controller (Craig: uses stored information (session-state data) in the case to restart an interrupted session; col. 14, lines 13-15).

However, they fail to provide a managing module that is distributed, as claimed.

In an analogous art, Nelson teaches data that is stored in one storage device (memory 30) of a first controller is duplicated (stored) to the storage device (memory 35) of the other controller (col. 2, lines 60-65). By simultaneously duplicating/processing data to two separate controllers, the system acts as a distributed managing module. This creates a fault tolerant environment for the system (col. 3, lines 2-5).

Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined systems of Duso and Craig, with providing a distributed managing module, as taught by Nelson, for the benefit of providing mirrored memory in dual controllers provides a fault tolerant environment for the managing module in an interactive information distribution system.

In regard to Claim 3, the combined systems of Duso, Craig and Nelson disclose the method of claim 2, comprising the step of executing said video session from said at least one managing module on said primary head-end controller wherein said managing module is non-distributed (Duso: system

provides a hot-failover redundant configuration (non-distributed); col. 6, lines 31-36).

In regard to Claim 4, the combined systems of Duso, Craig and Nelson disclose the method of claim 3, comprising the steps of:

processing said session-state data through said at least one distributed managing module (Nelson: col. 2, lines 60-65) concurrently on said primary head-end controller and said at least one secondary head-end controller (Duso: 28 & 29), wherein said at least one distributed managing module on said primary head-end controller and said at least one secondary head-end controller is an active mode (Duso: 28 active); and

processing said session-state data from said at least one non-distributed managing module on said primary head-end controller (Duso: 28), wherein said at least one non-distributed managing module on said primary head-end controller is in an active mode (Duso: 28 active), and wherein said at least one non-distributed managing module on said secondary head-end controller is in a standby mode (Duso: 29 provides a hot-failover redundant configuration; col. 6, lines 28-36).

In regard to Claim 5, the combined systems Duso, Craig and Nelson disclose the method of claim 4, a method comprising the steps of:

processing said session-state data (Craig: uses stored information (session-state data) in the case to restart an interrupted session; col. 14, lines 13-15) produced by said primary head-end controller (Duso: 28) via said at least one secondary head-end controller (Duso 29) in a failure mode of operation (Duso: 28 inoperable), wherein said primary head-end controller becomes inoperative (Duso: 29 provides a hot-failover redundant configuration; col. 6, lines 28-36).

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Duso et al (5,892,915), in view of Craig (5,790,176), in view of Nelson et al (5,928,367), in further view of Safadi (5,892,910).

In regard to Claim 6, the combined systems of Duso, Craig and Nelson disclose the method of claim 5.

However, they fail to provide an access controller, and streaming from the access controller in a failure mode of operation, wherein the secondary head-end controller manages said video session between said stream server and said access controller.

In an analogous art, Safadi teaches providing an access controller (Fig. 3, multiple network controllers 62), which support upstream access for interactive

services requested by the set-top terminals (col. 11, lines 12-13). The access controller provides the benefit of creating support for a large interactive subscriber base.

Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined systems of Duso, Craig and Nelson with providing an access controller, as taught by Safadi, for the benefit of providing support for a large interactive subscriber base in an interactive video distribution system.

8. Claims 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duso (5,892,915), in view of Craig (5,790,176), in further view of Beal et al (5,155,845).

In regards to Claims 7 and 9, the combined systems of Duso and Craig disclose the method of claim 1, comprising the step of:

storing said session-state data (Craig: session manager 310 contains session supervisor 312 which tracks and records (storing) all data pertinent to each session (col. 13, lines 46-56) and maintains routing information for each session (col. 14, lines 7-15)) produced by said primary head-end controller (Duso: 28) on said at least one storage device (Craig: the storage device

necessary to store the data for 310/312) coupled to said primary head-end controller; and

storing said session-state data (Craig: session manager 310 contains session supervisor 312 which tracks and records (storing) all data pertinent to each session (col. 13, lines 46-56) and maintains routing information for each session (col. 14, lines 7-15)) produced by said at least one secondary head-end controller (Duso: 29).

However, they fail to store data from one controller on a storage device of the other controller, as claimed.

In an analogous art, Beal teaches data that is stored from a primary controller (Fig. 3, 121) onto a coupled storage device (Fig. 3, storage device 111; and 121 communicates normally with 111, col. 6, lines 56-58), and additionally a secondary controller (101) stores its data on the storage device coupled to the primary controller (101 stores onto the storage device 111; col. 6, line 64 – col. 7, line 2). This provides a system that upon a failure of a controller the other controller may perform the duties of the failed controller by operating from the duplicated records stored on the drive (col. 7, lines 17-22).

Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined systems of Duso and

Craig, with storing data from one controller on a storage device of the other controller, as taught by Beal, for the benefit of responding upon a failure of a controller with another controller such that the responding controller may perform the duties of the failed controller by operating from the failed controller's stored session state data stored on the storage device.

In regard to Claims 8 and 10, the combined systems of Duso, Craig and Beal disclose the method of claims 7 and 9 respectively, wherein said at least one storage device comprises a plurality of storage devices (Beal: Fig. 3, multiple drives 111_{1-n}), said method further comprising the step of:

replicating (Beal: col. 6, lines 58-64) said stored session-state data from one of said plurality of said storage devices coupled to said primary head-end controller (Duso: 28), to each of the remaining storage devices of said plurality of storage devices coupled to said at least one secondary head-end controller (Duso: 29); and

wherein said at least one secondary head-end controller (Duso: 29) retrieves said session-state data executed by said managing modules of said primary head-end controller for continuing said video session (Craig: uses stored information (session-state data) in the case to restart an interrupted session; col. 14, lines 13-15) with said subscriber equipment.

9. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Duso et al (5,892,915), in view of Safadi (5,572,517).

In regard to Claim 11, Duso discloses an interactive video distribution system (VOD, etc. col. 5, lines 35-37) including information provider equipment (Fig. 2, 20) and subscriber equipment (54), apparatus comprising:

a stream server (Fig. 2, 21);

a plurality of head-end controller (28 & 29), coupled to said stream server (as seen in Fig. 2), for managing a video session at a head-end (col. 6, lines 46-48).

However, Duso fails to provide a plurality of access controller, for interacting with subscriber equipment during a video session to responsively provide video information to the subscriber equipment upon a request for video information from the subscriber equipment, as claimed.

In an analogous art, Safadi teaches providing a plurality of access controllers (Fig. 3, multiple network controllers 62), which supports upstream access for interactive services requested by the set-top terminals (col. 11, lines 12-13). The access controllers (network controllers 62) oversee assignments whenever a session is established (VIP-VIU session is established (responsively provides); col. 10, lines 55-60). Multiple access controllers provide the benefit of

creating support for a larger subscriber base than could be supported by a single access controller.

Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Duso with providing a plurality of access controllers, for interacting with subscriber equipment during a video session to responsively provide video information to the subscriber equipment upon a request for video information from the subscriber equipment, as taught by Safadi, for the benefit of providing support for a larger subscriber base than could be supported by a single access controller in an interactive video distribution system.

10. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Armstrong et al (6,604,224), in view of Shrader et al (6,230,240), in view of Safadi (5,572,517), in further view of Craig (5,790,176).

In regard to Claim 12, the combined systems of Duso and Safadi disclose the apparatus of claim 11, wherein each head-end controller of said plurality of head-end controllers (Duso: 28 & 29) comprises:

a plurality of managing modules (Duso: the operating systems for 28 & 29; col. 6, lines 28-36) for executing said video session (operating system of

controller 28 (col. 6, lines 31-36) contain application software to appropriately schedule (execute) the service request (col. 8, lines 48-56));

a processor for processing data (Duso: Intel processor in 28; col. 6, lines 15-16 and col. 5, line 57) produced by said plurality of managing modules; and

memory devices (Duso: RAM in 28; col. 6, lines 15-16 and col. 5, lines 58-59), coupled to said processor, for temporarily storing data.

However, they fail to provide session-state data, as claimed.

In an analogous art, Craig teaches storing session-state data from an executed video session (session manager 310 contains session supervisor 312 which tracks and records all data pertinent to each session (col. 13, lines 46-56) and maintains routing information for each session (col. 14, lines 7-15)), for the benefit of using the information to restart an interrupted session (col. 14, lines 13-15).

Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined systems of Duso and Safadi with providing session-state data, as taught by Craig, for the benefit of using the stored information to continue processing an interrupted video session in an interactive information distribution system.

In regard to Claim 13, the combined systems of Duso, Safadi and Craig disclose the apparatus of claim 12, wherein said plurality of head-end controllers

comprises a primary head-end controller and at least one secondary head-end controller (Duso: controllers 28 (primary) & 29 (secondary)).

In regard to Claim 14, the combined systems of Duso, Safadi and Craig disclose the apparatus of claim 13, wherein:

in a normal mode of operation (Duso: 28 active), said primary head-end controller (Duso: 28) interacts with said stream server (Duso: 21) to provide said video information to said subscriber equipment (Duso: 28 includes application to schedule (execute) the service request; col. 8, lines 47-56), and said at least one secondary head-end controller remains in standby mode (Duso: 29 provides a hot-failover redundant configuration; col. 6, lines 28-36); and

in a failure mode of operation (Duso: 28 fails, 29 now active), said primary head-end controller is inoperative (Duso: 28), and said at least one secondary head-end controller (Duso: 29) interacts with said stream server (Duso: 21) to produce video information (Duso: contain application software to appropriately schedule (execute) the service request; col. 8, lines 48-56).

11. Claims 15-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Duso (5,892,915), in view of Safadi (5,572,517), in view of Craig (5,790,176), in further view of Nelson et al (5,928,367).

In regard to Claim 15, the combined systems of Duso, Safadi and Craig disclose the apparatus of claim 14, wherein said plurality of managing modules comprise:

at least one non-distributed managing module (Duso: system provides a hot-failover redundant configuration (non-distributed); col. 6, lines 31-36), for processing session-state data (Craig: session manager 310 contains session supervisor 312 which tracks and records all data pertinent to each session (col. 13, lines 46-56) and maintains routing information for each session (col. 14, lines 7-15)) by said primary head-end controller (Duso: 28).

However, they fail to provide at least one distributed managing module, for processing data through both controllers concurrently, as claimed.

In an analogous art, Nelson teaches data that is stored in one storage device (memory 30) of a first controller is duplicated (stored) to the storage device (memory 35) of the other controller (col. 2, lines 60-65). By simultaneously duplicating/processing data to two separate controllers, the system acts as a distributed managing module. This creates a fault tolerant environment for the system (col. 3, lines 2-5).

Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined systems of Duso and

Craig, with providing at least one distributed managing module, for processing data through both controllers concurrently, as taught by Nelson, for the benefit of providing mirrored memory in dual controllers provides a fault tolerant environment for the managing module in an interactive information distribution system.

In regard to Claim 16, the combined systems of Duso, Safadi, Craig and Nelson disclose the apparatus of claim 15.

They fail to interface a portion of the plurality of access controllers that are associated with a failed head-end controller with the operable secondary head-end controller, as claimed.

However, since the combined systems of Duso, Safadi, Craig and Nelson provide a distributed managing module (Nelson: col. 2, lines 60-65) that provides a fault-tolerant system (Nelson: col. 3, lines 2-5), then the distributed system created would logically redistribute the portion of the access controllers originally operating with the now failed head-end controller to the operable secondary head-end controller in order to continue operation of all open sessions.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined systems of Duso,

Safadi, Craig and Nelson to include interfacing a portion of the plurality of access controllers that are associated with a failed head-end controller with the operable secondary head-end controller in order to continue to operation of open sessions in a distributed system.

In regard to Claim 17, the combined systems of Duso, Safadi, Craig and Nelson disclose the apparatus of claim 16, wherein:

in a failure mode of operation (Duso: 28 fails, 29 active), said at least one distributed managing module and said at least one non-distributed managing module executes said video session through said at least one secondary head-end controller (Duso: system provides a hot-failover redundant configuration; col. 6, lines 31-36).

In regard to Claim 18, the combined systems Duso, Safadi, Craig and Nelson disclose the apparatus of claim 17.

However, they fail to provides a centrally networked storage device for centrally storing said session-state data produced by a plurality of managing modules, and retrieving said session-state data stored by a primary head-end controller for continued interaction with a stream server to provide video information to a network, as claimed.

In an analogous art, Nelson further teaches a centrally networked storage device (Fig. 2, 15). This provides the well-known advantage of having a single storage device that is available to all devices on the network that can also provide the sharing of data between those networked devices.

However, Nelson fails to retrieve data stored by a primary head-end controller for continued interaction with a stream server to provide video information to a network, as claimed.

Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined systems Duso, Safadi, Craig and Nelson with providing a centrally networked storage device, as further taught by Nelson, for the benefit of providing a single storage device that is available to all devices on the network that can also provide the sharing of data between those networked devices.

However, since the combined systems of Duso, Safadi, Craig and Nelson provide a distributed managing module (Nelson: col. 2, lines 60-65) that provides a fault-tolerant system (Nelson: col. 3, lines 2-5), then the distributed system created would logically retrieve the stored session-state data on the centrally networked storage device (Nelson: 15) in order to continue the interaction from a failed head-end controller on an operable secondary head-end controller for

continued interaction with a stream server to provide video information to the network.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined systems of Duso, Safadi, Craig and Nelson to include retrieving data stored by a primary head-end controller for continued interaction with a stream server to provide video information to a network, for the benefit of continued the interaction from a failed head-end controller on an operable secondary head-end controller for continued interaction with a stream server to provide video information to the network.

In regard to Claim 19, the combined systems of Duso, Safadi, Craig and Nelson disclose the apparatus of claim 17.

In an analogous art, Nelson further teaches a centrally networked storage device (Fig. 2, 15) that provides a plurality of storage devices (disks 12 within 15, as seen in Fig. 2). This provides the well-known advantage of having a single storage device with a large storage capacity that is available to all devices on the network that can also provide the sharing of data between those networked devices.

However, Nelson fails to locally store data stored by a primary and secondary head-end controller produced by a plurality of managing modules, as claimed.

Consequently, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined systems Duso, Safadi, Craig and Nelson with providing a centrally networked storage device, as further taught by Nelson, for the benefit of providing a single storage device with a large storage capacity that is available to all devices on the network that can also provide the sharing of data between those networked devices.

However, since the combined systems of Duso, Safadi, Craig and Nelson provide a distributed managing module (Nelson: col. 2, lines 60-65) that provides a fault-tolerant system (Nelson: col. 3, lines 2-5), then the distributed system created would logically store all session-state data on the coupled storage device from all the managing modules in order to continue all open interactions in the case of a failed head-end controller for continued interaction with a stream server to provide the video information to the network.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined systems of Duso, Safadi, Craig and Nelson to include retrieving data stored by a primary head-end

controller for continued interaction with a stream server to provide video information to a network, for the benefit of continuing all interactions in the case of a failed head-end controller for continued interaction with a stream server to provide the video information to the network.

In regard to Claim 20, the combined systems of Duso, Safadi, Craig and Nelson disclose the apparatus of claim 19, wherein:

said session-state data is replicated (Nelson: via the distributed managing module, each memory is duplicated; col. 2, lines 60-65) from one of said plurality of local storage devices coupled to said primary head-end controller (Duso: 28), and stored on the remaining plurality of local storage devices of said at least one secondary head-end controller (Duso: 29).

In regard to Claim 21, the combined systems of Duso, Safadi, Craig and Nelson disclose the apparatus of claim 20, wherein:

in a failure mode of operation (Duso: 28 fails, 29 active), said at least one secondary head-end controller (Duso: 29) retrieves said replicated (Nelson: col. 2, lines 60-65) session-state data (Craig: session manager 310 contains session supervisor 312 which tracks and records all data pertinent to each session (col. 13, lines 46-56), for continued interaction with said stream server to provide said video information to said network (Craig: uses stored information in the case to restart an interrupted session; col. 14, lines 13-15).

Conclusion

12. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

Certificate of Mailing

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

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_____

Signature: _____

Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tim Murphy whose telephone number is (703) 305-8144. The examiner can normally be reached on Monday through Thursday 8am – 5pm, and alternating Fridays 8am – 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the senior examiner, Chris Grant can be reached on (703) 305-4755. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Timothy M. Murphy
Patent Examiner
Art Unit 2611

tmm

CHRIS GRANT
PRIMARY EXAMINER